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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/535,103	05/16/2005	Zvi Ben-Shalom	26784U	3580
20529	7590	02/03/2009		
THE NATH LAW GROUP 112 South West Street Alexandria, VA 22314			EXAMINER FREAY, CHARLES GRANT	
			ART UNIT 3746	PAPER NUMBER
			MAIL DATE 02/03/2009	DELIVERY MODE PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

### Office Action Summary

**Application No.**

10/535,103

**Applicant(s)**

BEN-SHALOM ET AL.

**Examiner**

Charles G. Freay

**Art Unit**

3746

**Period for Reply** -- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 20 November 2008.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-20 is/are pending in the application.
- 4a) Of the above claim(s) 2-4 and 14 is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-5-13 and 15-20 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☒ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO/S5108)  
Paper No(s)/Mail Date 8/2005
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date \_\_\_\_\_
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: \_\_\_\_\_

## **DETAILED ACTION**

### ***Election/Restrictions***

Applicant's election without traverse of species 5 in the reply filed on November 20, 2008 is acknowledged.

### ***Claim Objections***

Claim 7 is objected to because of the following informalities: the phrase "wherein one or more valves is" should read "wherein the one or more valves are". Appropriate correction is required.

### ***Claim Rejections - 35 USC § 112***

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claims 1, 5-13 and 15-20 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

The claims are vague and indefinite because they make reference to the figures in the last line of the claim.

Claim 6 is vague and indefinite because it is unclear what is meant by "preloaded" does this mean that the conduit is loaded into a sleeve (note claim 5) before hand or is the applicant referring to a loading force applied to the conduit?

***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

Claims 1, 5-7, 9-11, 15 and 20 are rejected under 35 U.S.C. 103(a) as being unpatentable over Dockum et al (USPN 4,014,318) in view of Upton (USPN 6,450,773).

Dockum et al discloses a pump (see particularly Figs. 1, 3, 6a, 7 and 12) having four electrically operated valves 12, 14, 16, 17 connected by an electrical cable 42, 44 to a controller 56. The pump has a conduit 18 mounted within a sleeve 36. The driver in the form of an electromagnet 40, 46 is controlled by the controller 56 to have a temporo-spatial array similar to that shown in Fig. 4 of the instant application but having only three valve heads (see Figs 6a-6f). Fig. 7 discloses the use of plural pumps and Fig. 12 discloses an anti-free flow device. Dockum et al does not disclose the same temporo-spatial array as shown in Fig. 4 or discuss the use of a battery as a power source.

Upton discloses a similar deformable member pumping device having four valve/actuator elements A, B, C, D and a battery (col. 5 line 37). The valve elements are actuated in a successive manner (which can be determined by the graph portion of Fig. 4E) such as the temporo-spatial array as shown in Fig. 4 of the instant application. At the time of the invention it would have been obvious to one of ordinary skill in the art to utilize an actuation scheme as taught by Upton in the Dockum et al pump when four valves are being utilized in order to allow for the efficient pumping of a larger quantity of fluid while ensuring sealing and flow in one direction. It also would have been obvious to utilize a battery as a well known power source which is stand-alone and does not require plugging into an outlet.

With regards to claim 7 the examiner notes that part of the surface of the valve 156 shown in Figs. 11 and 15 is oblique to the conduit.

With regards to claims 10 and 11 the examiner gives official notice that connecting multiple pumps in series and/or in parallel is well known and that one of

ordinary skill in the art would have found it obvious to mount the pumps in such arrangements in order to create either greater flow or greater pressure.

Claims 16 and 17 are rejected under 35 U.S.C. 103(a) as being unpatentable over Dockum et al in view of Upton as applied to claim 1 above, and further in view of Brown (USPN 4,741,736).

As set forth above Dockum et al in view of Upton discloses the invention substantially as claimed but does not disclose a control panel detachable from the rest of the pump and communicating with the pump through a cable. Brown in Fig. 1 discloses a control panel 30 having a cable and being detachable from the rest of the pump 10. At the time of the invention it would have been obvious to one of ordinary skill in the art to provide the controller and pump of Dockum et al with a detachable control panel as taught by Brown in order to allow remote programming of the pump and also allow for the control panel to be removed so that the pump is simpler and easier to handle and transport.

Claims 18 and 19 are rejected under 35 U.S.C. 103(a) as being unpatentable over Dockum et al in view of Upton as applied to claim 1 above, and further in view of Franetzki et al (USPN 4,270,532).

As set forth above Dockum et al in view of Upton discloses the invention substantially as claimed but does not disclose a control panel communicating wirelessly through a transceiver. Franetzki et al disclose a controller 1,6 having a control panel 2

and a transmitter 11 which wirelessly communicates with a pump 13. At the time of the invention it would have been obvious to one of ordinary skill in the art to utilize a controller such as taught by Franetzki et al in the Dockum et al device in order to allow for remote control of the pump from an extended distance.

With regards to claim 19 Franetzki et al does not disclose a transceiver (i.e. a transmitter and a receiver in one unit). The examiner gives official notice that transceivers are well known wireless communication devices and that one of ordinary skill in the art would have found it obvious to substitute a transceiver for the transmitter of Franetzki et al in order to allow for two-way communication and thus allow the controller to receive information from the pump unit such as remaining battery life, the amount of fluid left in the reservoir, etc..

#### ***Allowable Subject Matter***

Claims 12 and 13 would be allowable if rewritten to overcome the rejection(s) under 35 U.S.C. 112, 2nd paragraph, set forth in this Office action and to include all of the limitations of the base claim and any intervening claims.

#### ***Conclusion***

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Gillespie, Jr. et al discloses a pump having wireless and handheld control units connected thereto (see Fig. 2), Loughname et al discloses a peristaltic pump having a rocking lever mechanism for squeezing the conduit.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Charles G. Freay whose telephone number is 571-272-4827. The examiner can normally be reached on Monday through Friday 8:30 A.M. to 5:30 P.M..

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Devon Kramer can be reached on 571-272-7118. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Charles G Freay/  
Primary Examiner  
Art Unit 3746

CGF  
January 30, 2009